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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/706,844	11/07/2000	Richard O. Grant	1139-201	8540

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Lieberman & Brandsdorfer LLC
12221 McDonald Chapel Drive
Gaithersburg, MD 20878-2252

EXAMINER

PRONE, JASON D

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/706,844

Applicant(s)

GRANT ET AL.

Examiner

Jason Prone

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-13,15,17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-13,15,17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 June 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 8 is objected to because of the following informalities: Claim 8 is dependent upon the cancelled claim 7. Examiner acknowledges that this was probably over looked during the writing of the amendment and has examined the claim if it was dependent from claim 6. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 repeats the limitation set forth in claim 1 and, therefore, is redundant.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1, 3-6, 8-13, 15, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephens et al. in view of Iacona et al. Stephens et al. discloses the invention including an elongate monofilament having a proximal and a distal end (36), a collar (38) secured to the distal end of the monofilament (Column 3 lines 14-24), that the

Art Unit: 3724

collar has a hollow interior section adapted to receive the monofilament (Column 3 lines 14-24), that the collar comprises a proximal and distal end (Fig. 7), that the distal end of the collar is flush with the distal end of the monofilament and the proximal end of the collar is adapted to extend toward the proximal end of the monofilament (Fig. 7), a cutting head (10) having a housing (12) with a first end (Fig. 1) adapted to be mounted to a drive shaft (16) and a second end (Fig. 2) having an elongate annular flange (24) and an aperture in the flange (32), that collar comprises a hollow circular cross section (Fig. 7), that the collar is crimped to the monofilament (Column 3 lines 15-20), that the crimp forms an indentation into the monofilament forward of the distal end (Fig. 7), that the crimp is adapted to reduce stress and strain on the monofilament (Fig. 7), and that the collar is comprised of a metallic material (Column 3 lines 15-20) but fails to disclose that the proximal end of the collar comprises a flange, that the flange and the collar are concentric, that the flange includes an external diameter greater than an external diameter of the collar, that the flange is adapted to place the monofilament adjacent to the aperture, that the distal end of the collar is adapted to encircle a portion of the monofilament extending from the flange to the distal end of the collar, that the proximal end of the flange is placed in communication with the interior wall of the aperture, that a portion of the monofilament extending from the distal end of the collar to the flange rests within the interior wall, and that the collar is within the interior wall. lacona et al. teaches of a proximal end of the collar comprises a flange (70), that the flange and the collar are concentric (Fig. 7), that the flange includes an external diameter greater than an external diameter of the collar (Fig. 7), that the flange is adapted to place the

monofilament adjacent to the aperture (Fig. 7), that the distal end of the collar is adapted to encircle a portion of the monofilament extending from the flange to the distal end of the collar (Fig. 7), that the proximal end of the flange is placed in communication with the interior wall of the aperture (83), that a portion of the monofilament extending from the distal end of the collar to the flange rests within the interior wall (Fig. 7), and that the collar is within the interior wall (Fig. 7). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Stephens et al. with the flange, as taught by Iacona et al., to have provided a more efficient manner of keeping the monofilament intact during use.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stephens et al. in view of Iacona et al. as applied to claims 1, 3-6, 8-13, 15, 17, and 19 above, and further in view of Fogle. Stephens et al. and Iacona et al. disclose the invention but fail to disclose that the monofilament comprises a non-circular cross section. Fogle teaches of a monofilament with a non-circular cross section (Figs. 7 and 8). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Stephens et al. combined with Iacona et al. with a monofilament with a non-circular cross section, as taught by Fogle, to provide a greater cutting surface area.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Briar, Proulx, Wood, Frantello, Masciarella et al., Hult et al, Tuggle, Carlsen, Fogle ('837), and Proulx et al.

Art Unit: 3724

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 703-605-4287.

The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen N. Shoap can be reached on 703-308-1082. In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.



JP
February 26, 2003



Allen N. Shoap
Supervisory Patent Examiner
Group 3700